

Adding Fractions

When you are adding two fractions that do not have a common denominator and you cannot easily change one of the fractions to the other's denominator, follow these steps on this problem:

$$\frac{2}{5} + \frac{1}{6}$$

The common denominator for the above problem is $5 \times 6 = 30$. We arrive at this number by multiplying the denominator of the 1st fraction (5) and the denominator of the 2nd fraction (6).

Write down the new problem as:

$$\frac{\quad}{30} + \frac{\quad}{30}$$

To find the denominator, for the 1st fraction, write:

$$\frac{2}{5} = \frac{\quad}{30}$$

Now 5 times what number equals 30? Six, **right!** Now, whatever you multiply on the bottom, go ahead and multiply on the top. So $2 \times 6 = 12$ as you can see below.

$$\frac{2}{5} \times \frac{6}{6} = \frac{12}{30}$$

To find the denominator, for the 2nd fraction, write:

$$\frac{1}{6} = \frac{\quad}{30}$$

At this time, 6 times what number equals 30? Five, **correct!** Now, whatever you multiply on the bottom, go ahead and multiply on the top. So $1 \times 5 = 5$ as you can see below.

$$\frac{1}{6} \times \frac{5}{5} = \frac{5}{30}$$

Place the new numerators over the denominators on your paper and now you solve the problem.

$$\frac{12}{30} + \frac{5}{30} = \frac{17}{30}$$

$12 + 5 = 17$ as the denominator stays as 30. The answer is $\frac{17}{30}$.

Solve the following 10 addition problems:

$$\frac{1}{3} + \frac{1}{2}$$

$$\frac{2}{3} + \frac{1}{4}$$

$$\frac{2}{5} + \frac{1}{6}$$

$$\frac{3}{8} + \frac{1}{4}$$

$$\frac{3}{4} + \frac{5}{6}$$

$$\frac{3}{5} + \frac{4}{7}$$

$$\frac{3}{10} + \frac{3}{5}$$

$$\frac{7}{12} + \frac{5}{6}$$

$$\frac{7}{8} + \frac{5}{6}$$

$$\frac{2}{3} + \frac{4}{7}$$